

**UNITED STATES PATENT AND TRADEMARK OFFICE**  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,517,356

Page 1 of 2

APPLICATION NO.: 10/510,451

ISSUE DATE : April 14, 2009

INVENTOR(S) : Russell Heinrich

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 19, line 49, after the word "tissue", insert the word --property--;

Column 19, line 52, cancel the word "of";

Column 19, line 60, "wherein" should be changed to --wherein,--;

Column 19, line 61, "step" should be changed to --step,--;

Column 19, line 64, "surgical stapler" should be changed to --method--;

Column 20, line 60, cancel the text "first jaw member is adapted to receive a drive member being" and insert the following text --driving member is--;

Column 20, line 61, "drive" should be changed to --driving--;

Column 20, line 64, "drive" should be changed to --driving--;

Column 21, line 9, "drive" should be changed to --driving--;

Column 21, line 18, "drive" first occurrence should be changed to --driving--;

Column 21, line 18, "drive" second occurrence should be changed to --driving--;

Column 23, line 5, after the word "enhancer", insert the following text --through the needles--;

**MAILING ADDRESS OF SENDER (Please do not use customer number below):**

Carter, DeLuca, Farrell & Schmidt, LLP  
445 Broad Hollow Road, Suite 420  
Melville, NY 11747

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**UNITED STATES PATENT AND TRADEMARK OFFICE  
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Page 2 of 2

PATENT NO. : 7,517,356

APPLICATION NO.: 10/510,451

ISSUE DATE : April 14, 2009

INVENTOR(S) : Russell Heinrich

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 23, line 7, "reinforcing" should be changed to --enhancing--; and

Column 23, line 22, "an" should be changed to --a--.

**MAILING ADDRESS OF SENDER (Please do not use customer number below):**

Carter, DeLuca, Farrell & Schmidt, LLP  
445 Broad Hollow Road, Suite 420  
Melville, NY 11747

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

## Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Atty. Docket: 2797 (203-3175 PCT US)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**APPLICANT(S):** Russell Heinrich      **EXAMINER:** Michael G. Mendoza

**PATENT NO.:** 7,517,356      **ISSUE DATE:** April 14, 2009

**SERIAL NO.:** 10/510,451      **ART UNIT:** 3734

**FILED:** October 4, 2004      **DATED:** August 20, 2009

**FOR:** **SURGICAL STAPLER AND METHOD**

ATTN: Certificate of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REQUEST FOR CERTIFICATE OF CORRECTION**

Sir:

In view of the issuance of U.S. Patent No. 7,517,356 on April 14, 2009, Applicants request a Certificate of Correction and consideration of the following:

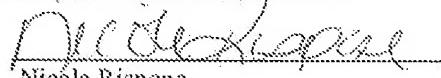
Remarks begin on page 2 of this paper.

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**CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. § 1.8(a)**

I hereby certify that this correspondence is being transmitted on the date below with the United States Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450, via electronic submission.

Dated: August 20, 2009

  
Nicole Risponce

Patent No. 7,517,356  
Issue Date: April 14, 2009  
Application No.: 10/510,451  
Filing Date: October 4, 2004  
Attorney Docket No.: 2797 (203-3175 PCT US)  
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**REMARKS**

The above-identified patent has been reviewed in light of its publication on April 14, 2009. Applicants respectfully request issuance of a Certificate of Correction.

On June 6, 2008, Applicants filed an Amendment after Allowance under 37 C.F.R. § 1.312.

On March 18, 2009, a communication was mailed by the U.S. Patent Office indicating that the June 6, 2008 Amendment was considered but disapproved or denied entry because the amendment was incomplete as no amendments to claims 1, 2, 4, 16-18, 56 and 59 were found.

On April 6, 2009, Applicants' representative, Roberto Colón, conducted an interview with Examiner Michael G. Mendoza. In the interview, Applicants' representative explained to Examiner Mendoza that Applicants had an Electronic Acknowledgement Receipt evidencing that the amendments to claims 1, 2, 4, 16-18, 56 and 59 were included in the Amendment. Examiner Mendoza then recommended faxing the entire Amendment in conjunction with the Electronic Acknowledgement Receipt to his direct fax number (571-273-4698) and to the USPTO general fax number (571-273-8300).

In accordance with the Examiner's recommendation, on April 9, 2009, Applicants faxed a copy of the Amendment of June 6, 2008, a copy of the Electronic Acknowledgement Receipt, and a Response and Interview Summary to each of the fax numbers identified above. In the

Patent No. 7,517,356  
Issue Date: April 14, 2009  
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Response and Interview Summary of April 9, 2009, Applicants requested entry of the claim amendments set forth in the Amendment of June 6, 2008.

On April 14, 2009, Patent Application Serial No. 10/510,451 issued as Patent No. 7,517,356 without the claim amendments requested in the Amendment of June 6, 2008.

Since the Electronic Acknowledgement Receipt demonstrated that the Amendment of June 6, 2008 included amendments to claims 1, 2, 4, 16-18, 56 and 59, and was clearly disclosed by the records of the Office, Applicants respectfully request entry of the claim amendments set forth in the Amendment of June 6, 2008 via the present Certificate of Correction. In the interest of expediting this process, Applicants submit herewith a copy of the Amendment of June 6, 2008, a copy of the Electronic Acknowledgement Receipt of the Amendment of June 6, 2008, a copy of the Response and Interview Summary of April 9, 2009, and a copy of a Transmission Verification Report evidencing the complete transmission of the Response and Interview Summary of April 9, 2009.

In addition to the Amendment of June 6, 2008, Applicants submitted an Amendment on February 9, 2007, which among other things, amended claim 55 of the patent application (now claim 36 of the issued patent) to recite, *inter alia*, "the body tissue property enhancing system including ... a plurality of deployable needles disposed, one each, in the annular array of needle receiving slots for delivering the body enhancer through the needles". The amendment to claim 55 of the patent application nevertheless was not included in the issued U.S. Patent No. 7,517,356. Applicants submit that the amendment of claim 55 in the Amendment of February 9,

Patent No. 7,517,356

Issue Date: April 14, 2009

Application No.: 10/510,451

Filing Date: October 4, 2004

Attorney Docket No.: 2797 (203-3175 PCT US)

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2007 is clearly disclosed by the records of the Office. Accordingly, Applicants respectfully request entry of the amendment to claim 55 of the patent application via the present Certificate of Correction.

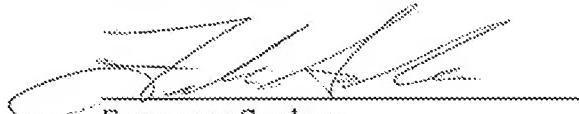
In addition, claim 5, which depends from claim 1, a method claim, erroneously recites, *inter alia*, “The surgical stapler according to claim 1”. It is respectfully requested that the text “surgical stapler” be changed to “method” as is proper for a dependent claim of an independent method claim. Applicants submit that the error is of a typographical or clerical nature and occurred in good faith. It is respectfully submitted that the requested correction does not involve such changes in the patent as would constitute new matter or would require reexamination. Accordingly, Applicants respectfully request entry of the change to claim 5 via the present certificate of correction.

In addition, the Amendment of June 6, 2008 erroneously neglected to change the second occurrence of the word “drive” in Column 21, line 18 to “driving” in accordance with the other changes of that amendment. It is respectfully requested that the text “drive” be changed to “driving” to be in conformance with the rest of the amendment of June 6, 2008. Applicants submit that the error is of a typographical or clerical nature and occurred in good faith. It is respectfully submitted that the requested correction does not involve such changes in the patent as would constitute new matter or would require reexamination. Accordingly, Applicants respectfully request entry of the change to the second occurrence of the word “drive” in Column 21, line 18 to “driving” via the present certificate of correction.

Patent No. 7,517,356  
Issue Date: April 14, 2009  
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Filing Date: October 4, 2004  
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Should the Certificate of Correction Branch believe that a telephone interview may facilitate resolution of any remaining matters, the Certificate of Correction Branch is respectfully requested to contact Applicants' undersigned attorney at the telephone number indicated below.

Respectfully submitted,



Francesco Sardone  
Reg. No. 47,918  
Attorney for Applicant(s)

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**Send correspondence to:**  
Chief Patent Counsel  
Covidien  
60 Middletown Avenue  
North Haven, Connecticut 06473

# **EXHIBIT 1**

Atty. Docket No: 2797 (203-3175 PCT US)  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Russell Heinrich EXAMINER: Michael G. Mendoza

SERIAL No.: 10/510,451 GROUP: Art Unit 3734

FILED: October 4, 2004 DATED: June 6, 2008

TITLE: **SURGICAL STAPLER AND METHOD**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT TRANSMITTAL FORM**

Sir:

Transmitted herewith is an Amendment in the above-identified application.

- Applicant claims small entity status of this application under 37 C.F.R. 1.27  
 No additional fee is required.

The fee has been calculated as shown below:

(Col. 1)		(Col. 2)	(Col. 3)	SMALL ENTITY		OR	OTHER THAN A SMALL ENTITY	
				RATE	ADDL. FEE		RATE	ADDL. FEE
CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA					
TOTAL	* 47	MINUS	** 75	= 0	x 25= \$		x 50= \$	
INDEP.	* 4	MINUS	*** 6	= 0	x 105= \$	OR	x 210= \$	
					x 185= \$		x 370= \$	
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIMS					TOTAL \$ 0.00		TOTAL \$	

\* If the entry in Column 1 is less than the entry in Column 2, write "0" in Column 3.  
\*\* If the "HIGHEST NUMBER PREVIOUSLY PAID FOR" in this space is less than 20, write "20" in this space.  
\*\*\* If the "HIGHEST NUMBER PREVIOUSLY PAID FOR" in this space is less than 3, write "3" in this space. The "HIGHEST NUMBER PREVIOUSLY PAID FOR" (Total or Independent) is the highest number found from the equivalent box in Column 1 of a prior amendment or the number of claims originally filed.

**CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. §1.8(a)**

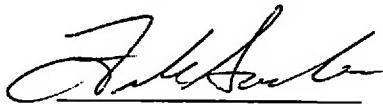
I hereby certify that this correspondence is being transmitted on the date below with the United States Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450, via electronic submission.

Dated: June 6, 2008

  
Nicole Rispone

- Please charge Deposit Account No. 21-0550 in the amount of \$\_\_\_\_\_.
- A check in the amount of \$ \_\_\_\_\_ is enclosed.
- Please charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. § 1.16 and/or 1.17 at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account No. 21-0550. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. 21-0550 therefor.

Respectfully submitted,



Francesco Sardone  
Reg. No.: 47,918  
Attorney for Applicant(s)

*Carter, DeLuca, Farrell & Schmidt, LLP*  
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FS/nr

Atty. Docket: 2797 (203-3175 PCT US)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**APPLICANT(S):** Russell Heinrich      **EXAMINER:** Michael G. Mendoza  
**SERIAL NO.:** 10/510,451      **ART UNIT:** 3734  
**FILED:** October 4, 2004      **DATED:** June 6, 2008  
**FOR:** **SURGICAL STAPLER AND METHOD**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT AFTER ALLOWANCE UNDER 37 C.F.R. §1.312**

Sir:

Applicant respectfully requests entry of the following amendment prior to issuance and publication of the above-identified matter.

**Amendment to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

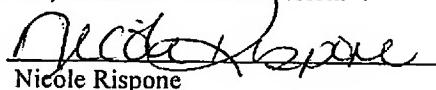
**Remarks** begin on page 15 of this paper.

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**CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. §1.8(a)**

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Dated: June 6, 2008



Nicole Rispone

Application No.: 10/510,451

Filing Date: October 4, 2004

Attorney Docket No.: 2797 (203-3175 PCT US)

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### **Amendments to the Claims**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1. (Currently Amended) A method for enhancing one or more properties of body tissue to be repaired or joined by surgical staples comprising the steps of:

providing a surgical stapler including a staple anvil and a staple cartridge each positioned adjacent a distal end of the surgical stapler and operable in juxtaposition relative to each other, the staple cartridge including:

a working surface;

one or more rows of individual staple slots formed in the working surface;

a plurality of surgical staples individually disposed within the individual staple slots;

a driving member for firing the surgical staples from their slots and against the staple anvil;

a body tissue property enhancing system configured and adapted to enhance one or more properties of the body tissue to be repaired or joined by the surgical staples formed by firing them into body tissue, the body tissue property enhancing system including a reservoir of biocompatible wound closure material and a plurality of ducts in communication with the reservoir and the working surface of the cartridge; and

a plurality of deployable needles each having a tip, the needles being adapted and disposed in the ducts such that the tips can be extended out of the working surface of the staple

cartridge to penetrate at least a layer of adjacent layers of body tissue and to allow the biocompatible wound closure material to be delivered through the needles to penetrate one or more layers of body tissue;

approximating the staple anvil and staple cartridge with adjacent layers of body tissue therebetween; and firing the surgical stapler, wherein firing of the surgical stapler includes driving the plurality of surgical staples through the adjacent layers of body tissue to mechanically secure the layers of body tissue together and concomitantly activating the body tissue property enhancing system to enhance one or more properties of the adjacent layers of repaired or joined body tissue.

2. (Currently Amended) The method according to claim 1, wherein activating [[of]] the body tissue property enhancing system includes delivering an amount of the biocompatible wound closure material to at least one of or between the adjacent layers of repaired or joined body tissue.

3. (Original) The method according to claim 1, wherein upon firing of the surgical stapler, the biocompatible wound closure material is expelled from the reservoir of the staple cartridge.

4. (Currently Amended) The method according to claim 3, wherein, in the providing step, each of the plurality of deployable needles is normally biased to a non-extended position and is movable against the bias to the extended position.

Claims 5-6 (Canceled)

7. (Original) The method according to claim 1, wherein the biocompatible wound closure material is an adhesive material.

8. (Original) The method according to claim 7, wherein the adhesive material is comprised of a protein derived, aldehyde based adhesive material.

9. (Original) The method according to claim 7, wherein the adhesive material is comprised of an albumin/glutaraldehyde material.

10. (Original) The method according to claim 7, wherein the adhesive material is a cyanoacrylate-based material.

11. (Original) The method according to claim 1, wherein the biocompatible wound closure material is a tissue sealant material.

12. (Original) The method according to claim 11, wherein the tissue sealant material is comprised of a synthetic polyethylene glycol-based hydrogel material.

13. (Original) The method according to claim 1, wherein the biocompatible wound closure material is a hemostat.

14. (Original) The method according to claim 13, wherein the hemostat is comprised of a combination of fibrinogen and thrombin.

15. (Previously Presented) A surgical stapler comprising:

a first jaw adapted to receive a staple cartridge in a distal end of the first jaw, the staple cartridge containing a plurality of individual surgical staples, and having a working surface with a plurality of staple slots formed therein;

a second jaw having a staple anvil in a distal end of the second jaw, such that during the operation of the surgical stapler the staple cartridge and the staple anvil can be approximated relative to one another;

a driving member for firing the surgical staples from their staple slots and against the approximated staple anvil;

a body tissue property enhancing system for enhancing one or more properties of body tissue to be repaired or joined by the surgical stapler, the body tissue property enhancing system including:

a biocompatible wound closure material dispensing system for dispensing an amount of surgically biocompatible wound closure material to a target staple site during at least one of prior to, after and concomitant with a firing of the surgical stapler to expel the plurality of staples loaded in the staple cartridge, the body tissue property enhancing system comprising at least one reservoir disposed in the staple cartridge for containing the biocompatible wound closure material therein;

a plurality of ducts formed in the staple cartridge, wherein the plurality of ducts communicate with and extend from the at least one adhesive reservoir to the working surface of the staple cartridge; and

a plurality of deployable needles each having a tip, the needles being adapted and disposed in the ducts of the staple cartridge such that their tips can be extended out of the working surface of the staple cartridge to penetrate at least a layer of the adjacent layers of body tissue and to allow the biocompatible wound closure material to be delivered through the needles to penetrate one or more layers of the body tissue.

16. (Currently Amended) The surgical stapler according to claim 15, wherein ~~the first jaw is adapted to receive a drive~~ the driving member being ~~that is~~ adapted to be slidingly disposed within the staple cartridge, the [[drive]] driving member being adapted to force the biocompatible wound closure material from the reservoir out through the plurality of ducts and about the needles disposed therein as the [[drive]] driving member is displaced in a distal direction, to allow the biocompatible wound closure material to penetrate into the body tissue to be repaired or joined.

17. (Currently Amended) The surgical stapler according to claim 16, wherein the staple cartridge further comprises: one or more laterally spaced rows of individual staple slots, the rows of staple slots extending along the staple cartridge; a plurality of individual surgical staples having a back span and disposed, one each, within the individual staple slots; and a plurality of staple pushers disposed one each within the staple slots and in a position to push one

of the plurality of staples from the slot, wherein the [[drive]] driving member is adapted to displace the staple pushers into the slots and to concomitantly expel a quantity of the biocompatible wound closure material about the needles and out through the plurality of ducts.

18. (Currently Amended) The surgical stapler according to claim 16, wherein the biocompatible wound closure material dispensing system further includes a flexible liner extending longitudinally through the staple cartridge, wherein the liner prevents the biocompatible wound closure material from contacting the [[drive]] driving member as the drive member is displaced distally through the staple cartridge.

19. (Original) The surgical stapler according to claim 16, wherein the plurality of needles have a tip, a first position wherein the needles are entirely retained within the staple cartridge and a second position wherein the tips of the plurality of needles project out from the working surface of the staple cartridge.

20. (Original) The surgical stapler according to claim 19, wherein each of the plurality of needles is biased to the first position.

21. (Original) The surgical stapler according to claim 15, wherein the surgical stapler is for performing open gastrointestinal anastomosis operations.

22. (Original) The surgical stapler according to claim 15, wherein the surgical stapler is for performing endoscopic or laparoscopic gastrointestinal operations.

23. (Original) The surgical stapler according to claim 15, wherein the surgical stapler is for performing end-to-end anastomosis operations.

24. (Original) The surgical stapler according to claim 15, wherein the biocompatible wound closure material is an adhesive comprised of a protein derived, aldehyde-based adhesive material.

25. (Original) The surgical stapler according to claim 24, wherein the biocompatible wound closure material is an adhesive comprised of an albumin/glutaraldehyde material.

26. (Original) The surgical stapler according to claim 24, wherein the biocompatible wound closure material is an adhesive comprised of a cyanoacrylate-based material.

27. (Original) The surgical stapler according to claim 15, wherein the biocompatible wound closure material is a tissue sealant material.

28. (Previously Presented) The surgical stapler according to claim 27, wherein the tissue sealant material is comprised of a synthetic polyethylene glycol-based hydrogel material.

29. (Original) The surgical stapler according to claim 15, wherein the biocompatible wound closure material is a hemostat.

30. (Original) The surgical stapler according to claim 15, wherein the plurality of ducts are positioned adjacent to or aligned between the one or more laterally spaced apart rows of staple slots.

31. (Original) The surgical stapler according to claim 15, wherein each of the plurality of deployable needles is provided with a retracting element for withdrawing each of the plurality of deployable needles back into the staple cartridge after a firing of the surgical stapler.

Claims 32-46 (Cancelled).

47. (Previously Presented) A surgical staple cartridge configured and adapted to be removably received within a surgical stapler, the staple cartridge comprising:  
a working surface;  
one or more laterally spaced apart rows of staple slots formed in the working surface;

a plurality of surgical staples disposed, one each, within the staple slots for mechanically securing adjacent layers of body tissue to one another, and a tissue property enhancing system for enhancing one or more properties of body tissue to be repaired or joined by the surgical stapler, the tissue property enhancing system being configured and adapted to non-mechanically enhance the repaired or joined body tissue, the tissue property enhancing system including:

a wound closer material dispensing system for dispensing an amount of surgically biocompatible wound closure material to a target staple site during at least one of prior to, after and concomitant with a firing of the surgical stapler to expel a plurality of staples loaded in the staple cartridge, the tissue property enhancing system comprising at least one reservoir disposed in the staple cartridge for containing the biocompatible wound closure material therein;

a plurality of ducts formed in the staple cartridge, wherein the plurality of ducts extend from the at least one adhesive reservoir to the upper surface of the staple cartridge; and

a plurality of deployable needles each having a tip, the needles being adapted and disposed in the cartridge and ducts such that their tips can be extended out of the working surface of the staple cartridge and penetrate at least a layer of the adjacent layers of body tissue and to allow the biocompatible wound closure material to be delivered through the needles and to penetrate one or more layers of the body tissue.

48. (Original) The surgical staple cartridge according to claim 47, wherein the tissue property enhancing system is configured and adapted to deliver an amount of the biocompatible wound closure material to at least one of the adjacent layers of body tissue to adhere the adjacent layers of body tissue to one another.

49. (Original) The surgical staple cartridge according to claim 47, wherein the tissue property enhancing system is configured and adapted to deliver an amount of biocompatible wound closure material between the adjacent layers of body tissue to adhere the adjacent layers of body tissue to one another.

50. (Original) The surgical staple cartridge according to claim 47, wherein the staple cartridge includes a reservoir adapted to contain a quantity of the biocompatible wound closure material.

51. (Original) The surgical staple cartridge according to claim 50, wherein normally each of the plurality of deployable needles is biased into a retracted condition.

Claims 52-54. (Canceled)

55. (Previously Presented) A surgical stapler comprising:  
a handle assembly;  
a tubular body portion extending from the handle assembly;  
a staple cartridge assembly operatively connected to a distal end of the tubular body, the staple cartridge including a pair of annular arrays of staple receiving slots, wherein each staple receiving slot includes a surgical staple disposed therein for mechanically securing adjacent layers of body tissue to one another, an anvil member operatively connected by a shaft to the distal end of the tubular body, opposite the staple cartridge assembly; and

a body tissue property enhancing system configured and adapted to non-mechanically enhance one or more properties of the adjacent layers of repaired or joined body tissue to one another along an annular staple line formed by the firing of the surgical stapler, the body tissue property enhancing system including an annular array of needle receiving slots, and a plurality of deployable needles disposed, one each, in the annular array of needle receiving slots for delivering the body tissue enhancer through the needles.

56. (Currently Amended) The surgical stapler according to claim 55, wherein the body tissue property ~~reinforcing~~ enhancing system is configured and adapted to deliver an amount of biocompatible wound closure material to the adjacent layers of body tissue to enhance the repairing or joining of the adjacent layers of body tissue to one another.

57. (Original) The surgical stapler according to claim 55, wherein the biocompatible wound closure material is an adhesive and the body tissue property enhancing system is configured and adapted to deliver an amount of the adhesive into at least one of the adjacent layers of body tissue to adhere the adjacent layers of body tissue to one another.

58. (Original) The surgical stapler according to claim 55, wherein the surgical stapler is for performing end-to-end anastomosis operations.

59. (Currently Amended) The surgical stapler according to claim 58, wherein the staple cartridge assembly includes [[an]] a staple pusher including a distal portion defining

concentric rings of peripherally spaced fingers adapted to be receivable, one each, within a respective one of the pair of annular arrays of staple receiving slots and a respective one of the annular array of needle receiving slots.

60. (Original) The surgical stapler according to claim 59, wherein each deployable needle is biased into a retracted position.

61. (Original) The surgical stapler according to claim 59, wherein each deployable needle is biased to a retracted position by a spring.

62. (Original) The surgical stapler according to claim 61, further including a plurality of capsules disposed, one each, in the array of needle receiving slots, between a respective needle and a respective finger which is receivable in the needle receiving slot.

63. (Original) The surgical stapler according to claim 62, wherein each capsule encapsulates a quantity of biocompatible wound closure material therein.

64. (Original) The surgical stapler according to claim 63, wherein each capsule is adapted to rupture upon application of a compressive force.

65. (Original) The surgical stapler according to claim 64, wherein the compressive force is applied to each of the capsules by the distal advancement of the fingers receivable within the needle receiving slots and through the respective needle receiving slots.

66. (Original) The surgical stapler according to claim 65, wherein distal advancement of the fingers receivable within the needle receiving slots causes the plurality of needles to deploy.

Claims 67-74. (Canceled)

75. (Previously Presented) The surgical stapler according to claim 1, wherein the plurality of deployable needles are each adapted to allow the biocompatible wound closure material to be delivered along an exterior of the needles.

Application No.: 10/510,451

Filing Date: October 4, 2004

Attorney Docket No.: 2797 (203-3175 PCT US)

Page 15 of 15

**REMARKS**

The above-identified application has been reviewed following issuance of the Notice of Allowance mailed on March 7, 2008. Claims 1-4, 7-31, 47-51, 55-66 and 75 are currently pending, claims 1, 2, 4, 16-18, 56 and 59 having been amended herein, and claims 5, 6, 32-46, 52-54, and 67-74 having been previously canceled. Reconsideration of the present application and entry of the present amendments is respectfully requested.

Applicant notes that each of claims 1, 2, 4, 16-18, 56 and 59 included minor inconsistencies or typographical errors which Applicant has corrected by the present amendment.

It is respectfully requested that the amendments to claims 1, 2, 4, 16-18, 56 and 59 do not add new matter and be entered prior to issuance and publication of the above-identified matter.

Should the Examiner believe that a telephone or personal interview may facilitate resolution of any remaining matters, the Examiner is respectfully requested to contact Applicants' undersigned attorney at the telephone number indicated below.

Respectfully submitted,



Francesco Sardone  
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Attorney for Applicant(s)

*Carter, DeLuca, Farrell & Schmidt, LLP*

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Melville, New York 11747

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# **EXHIBIT 2**

## **Electronic Acknowledgement Receipt**

### **Payment information:**

Submitted with Payment	no
<b>File Listing:</b>	

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)			
1		203-3175PCTUS-Amt_After Allowance.pdf	1632279 aab581e09a34c8dabb56bd8a1b59289 113ed7020	yes	17			
<b>Multipart Description/PDF files in .zip description</b>								
<b>Document Description</b>		<b>Start</b>	<b>End</b>					
Miscellaneous Incoming Letter		1	2					
Amendment after Notice of Allowance (Rule 312)		3	3					
Claims		4	16					
Applicant Arguments/Remarks Made in an Amendment		17	17					
<b>Warnings:</b>								
<b>Information:</b>								
<b>Total Files Size (in bytes):</b>				1632279				
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><b>New Applications Under 35 U.S.C. 111</b>  If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><b>National Stage of an International Application under 35 U.S.C. 371</b>  If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><b>New International Application Filed with the USPTO as a Receiving Office</b>  If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>								

# **EXHIBIT 3**

Atty. Docket: 2797 (203-3175 PCT US)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**APPLICANT(S):** Russell Heinrich

**EXAMINER:** Michael G. Mendoza

**SERIAL NO.:** 10/510,451

**ART UNIT:** 3734

**FILED:** October 4, 2004

**DATED:** April 9, 2009

**FOR:** **SURGICAL STAPLER AND METHOD**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE AND INTERVIEW SUMMARY**

Sir:

In response to the Rule 312 Communication mailed on March 18, 2009, please consider the following:

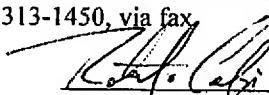
Remarks begin on page 2 of this paper.

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**CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. §1.8(a)**

I hereby certify that this correspondence is being transmitted on the date below with the United States Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450, via fax.

Dated: April 9, 2009



\_\_\_\_\_  
Roberto Colón

**REMARKS**

The above-identified application has been reviewed in light of the Rule 312 Communication mailed on March 18, 2009. Claims 1-4, 7-31, 47-51, 55-66 and 75 are currently pending. Reconsideration of the present application is respectfully requested.

On June 6, 2008, Applicants filed an Amendment after Allowance under 37 C.F.R. § 1.312.

On March 18, 2009, a communication was mailed by the U.S. Patent Office indicating that the June 6, 2008 Amendment was considered but disapproved or denied entry because the amendment was incomplete as no amendments to claims 1, 2, 4, 16-18, 56 and 59 were found.

On April 6, 2006, Applicants' representative, Roberto Colón, conducted an interview with Examiner Michael G. Mendoza. In the interview, Applicants' representative explained to Examiner Mendoza that Applicants had an Electronic Acknowledgement Receipt evidencing that the amendments to claims 1, 2, 4, 16-18, 56 and 59 were included in the Amendment. Examiner Mendoza then suggested faxing the entire Amendment in conjunction with the Electronic Acknowledgement Receipt to his direct fax number (571-273-4698) and to the USPTO general fax number (571-273-8300).

Accordingly, per the Examiner's suggestion, Applicants submit herewith a copy of the Amendment of June 6, 2008 and a copy of the Electronic Acknowledgement Receipt.

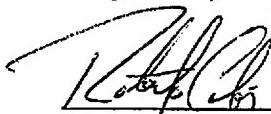
Since the Electronic Acknowledgement Receipt demonstrates that the Amendment included amendments to claims 1, 2, 4, 16-18, 56 and 59, Applicants respectfully request entry of the claim amendments set forth in the Amendment of June 6, 2008.

Application No.: 10/510,451  
Filing Date: October 4, 2004  
Attorney Docket No.: 2797 (203-3175 PCT US)  
Page 3 of 3

It is respectfully submitted that the amendments to claims 1, 2, 4, 16-18, 56 and 59 do not add new matter, and it is respectfully requested that these claim amendments be entered prior to issuance and publication of the above-identified matter.

Should the Examiner believe that a telephone interview may facilitate resolution of any remaining matters, the Examiner is respectfully requested to contact Applicants' undersigned attorney at the telephone number indicated below.

Respectfully submitted,



Roberto Colón  
Reg. No. 58,651  
Attorney for Applicant(s)

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TRANSMISSION VERIFICATION REPORT

TIME : 04/09/2009 00:35  
NAME : CARTER DELUCA FARELL  
FAX : 6315013526  
TEL : 6315015700

DATE, TIME	04/09 00:30
FAX NO./NAME	15712738300
DURATION	00:05:05
PAGE(S)	22
RESULT	OK
MODE	STANDARD ECM

Atty. Docket: 2797 203-3175 PCT US)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANT(S):	Russell Heinrich	EXAMINER:	Michael G. Mendoza
SERIAL NO.:	10/510,451	ART UNIT:	3734
FILED:	October 4, 2004	DATED:	April 9, 2009
FOR:	<b>SURGICAL STAPLER AND METHOD</b>		

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
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**RESPONSE AND INTERVIEW SUMMARY**

Sir:

In response to the Rule 312 Communication mailed on March 18, 2009, please consider the following:

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FAX NO./NAME	15712734698
DURATION	00:05:13
PAGE(S)	23
RESULT	CK
MODE	STANDARD ECM

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**Carter, DeLuca, Farrell  
& Schmidt LLP**

# Fax

To:	Exam. Michael G. Mendoza Group 3734	From:	Roberto Colon
Fax:	571-273-4698 and  571-273-8300	Date:	April 9, 2009
Phone:		Pages:	23 - pages (incl. Cover)
Re:	U.S. Serial No. 10/510,451	CC:	

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**\*Comments:**

Submitted herewith:

- 1) Response to Interview Summary
- 2) Copy of Electronic Acknowledgement Receipt dated June 6, 2008
- 3) Copy of Amendment Transmittal Form dated June 6, 2008

445 Broad Hollow Road  
Suite 225  
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Fax: (631) 501-3526

**Carter, DeLuca, Farrell  
& Schmidt LLP**

# Fax

<b>To:</b>	Exam. Michael G. Mendoza Group 3734	<b>From:</b>	Roberto Colon
<b>Fax:</b>	571-273-4698 and  571-273-8300	<b>Date:</b>	April 9, 2009
<b>Phone:</b>		<b>Pages:</b>	23 - pages (incl. Cover)
<b>Re:</b>	U.S. Serial No. 10/510,451	<b>CC:</b>	

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**•Comments:**

Submitted herewith:

- 1) Response to Interview Summary
- 2) Copy of Electronic Acknowledgement Receipt dated June 6, 2008
- 3) Copy of Amendment Transmittal Form dated June 6, 2008
- 4) Copy of Amendment After Allowance dated June 6, 2008

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# **EXHIBIT 4**

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Received  
Cover  
Page  
=====>

04/09/2009 08:38 6315013526	CARTER DELUCA FARELL	PAGE 01/22
Atty. Docket: 2797 (203-3175 PCT US)		
<b><u>IN THE UNITED STATES PATENT AND TRADEMARK OFFICE</u></b>		
APPLICANT(S): Russell Heinrich	EXAMINER: Michael G. Mendoza	
SERIAL NO.: 10/510,451	ART UNIT: 3734	
FILED: October 4, 2004	DATED: April 9, 2009	
FOR: SURGICAL STAPLER AND METHOD		
Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450		
<b><u>RESPONSE AND INTERVIEW SUMMARY</u></b>		
Sir:		
In response to the Rule 312 Communication mailed on March 18, 2009, please consider the following:		
Remarks begin on page 2 of this paper.		
<b><u>CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. 1.8(e)</u></b>		
I hereby certify that this correspondence is being transmitted on the date below with the United States Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450, via fax.		
Dated: April 9, 2009		
Roberto Colón		
PAGE 01/22 RECEIVED AT 4/9/2009 12:32:50 PM [Eastern Daylight Time] SVR:USPTO-BF2RF4/25 DNS:273200 CSID:6315013526 DURATION (min:ss)00:38		